



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/621,873

07/16/2003

Harold E. Mattice

IGT1P096/P-824

1742

79646

7590

05/15/2009

Weaver Austin Villeneuve & Sampson LLP - IGT

Attn: IGT

P.O. Box 70250

Oakland, CA 94612-0250

EXAMINER

DEODHAR, OMKAR A

ART UNIT

PAPER NUMBER

3714

MAIL DATE

DELIVERY MODE

05/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/621,873	Applicant(s) MATTICE ET AL.	
	Examiner OMKAR A. DEODHAR	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Final Rejection

Response to Arguments & Amendment

This is responsive to the RCE submitted 2/20/2009 with claim amendments & arguments.

Although the claims have been amended, Applicant has not changed the substance of the claims. Thus, Alcorn still applies. Applicant's only argument is that presently claimed features are not disclosed by the citations to Alcorn. Examiner respectfully disagrees & maintains his rejection. The amended claim limitations are addressed in the rejection below.

Newly added claim 22 requires an input device having a coin in switch or an input switch & output device with a video display – Alcorn teaches that typical gaming machines have coin acceptors & video displays. See Col. 1. Lines 32-39. His machine is no different. See Figure 1, Video Subsystem 22 & Col. 13. Lines 12-13 teaching a coin insert slot. Additionally, the gaming machine requires some type of input mechanism so it can be played.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-9 & 11-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alcorn (US 6,149,522).

Claims 1, 2, 7-9, 11-13 & 16-19:

Alcorn teaches:

A method of authenticating configuration data within or about a gaming machine with respect to a gaming machine boot process (Abstract – “The authentication program stored in the ... performs an authentication check on the casino game data set at appropriate times ... prior to commencement of game play ...” Boot processes take place prior to game play.)

the method comprising configuring a central processing unit designed or configured to execute executable programming instructions for generating a wager-based game on the gaming machine;

(Figure 1, processor 12. The CPU is programmed to provide the authentication routine. Alcorn’s system is for gaming machines which generate wager based games.)

storing the executable programming instructions in a memory device for generating the wager- based game; connecting a volatile programmable electronic

Art Unit: 3714

device comprising a plurality of logic elements programmable to form logic gates in a communication path between the central processing unit & the memory device;

(Col. 1. Lines 25-39 teach various types of volatile & non-volatile memory. Alcorn teaches that such components are used in electronic gaming machines to augment the traditional slot machine game. See Col. 7. Lines 1-15 teaching ROM & non-volatile RAM. Memory is necessarily comprised of the claimed logic elements. Executable instructions are stored in memory. Memory devices are coupled to the processor [& other gaming devices] in a path as shown in Figure 1.)

Monitoring a communication between the central processing unit & at least one of an input device & and output device by using the volatile programmable electronic device; storing instructions for configuring the volatile programmable electronic device to enable communications between the central processing unit & the memory device, wherein said storing instructions comprises storing the instructions within a read only configuration file included within a configuration;

(The system monitors communication between the various components shown in Figure 1. Item 25 shows a general purpose I/O device providing an interface to the game mechanical devices. The I/O device is coupled to the components shown in Figure 1 including the memory devices. As explained above, the memory devices may comprise both volatile & non-volatile types of storage.

Further, Alcorn teaches that for audit purposes, authentication information is transmitted via networking subsystem 21 to an on-site or off-site location. See Col. 9. Lines 32-40. This also requires monitoring of communications between the devices.

The devices shown in Figures 2 & 3 store executable instructions. They also store the boot file [a configuration file]. Col. 8. Lines 1-5 explicitly teach that ROM 29 & ROM 30 are unalterable memory devices. Thus, they are read-only memory devices. See also Figure 7 Steps 102-108 where Alcorn specifically teaches loading the boot file [& other necessary applications] from memory).

Accessing a separate read only custodial file, wherein at least a substantial portion of said custodial file is identical to at least a substantial portion of said configuration file when said configuration file is authentic, said custodial file residing in a location separate from said configurator; (In Col. 2. Lines 51-56, Alcorn teaches read-only memory storing a game data set. A custodial file is taught in Col. 3. Lines 50-55. When the configuration file is authentic, it should match the contents of the custodial file.)

(Regarding the following limitations, see the discussion following directly below where Examiner explains that specific claimed steps would have been obvious over Alcorn.)

holding the operating contents of said volatile programmable electronic device as substantially empty upon a shut down phase of said gaming machine to disable communication between the CPU & memory device; booting up said gaming machine after said shut down phase; transferring said configuration file from said configurator to said volatile programmable electronic device; configuring said volatile programmable electronic device with said configuration file; comparing at least a representative portion of data from said configuration file with at least a representative portion of data from

Art Unit: 3714

said custodial file; confirming whether said configuration file has been successfully compared to said custodial file to a sufficient level of satisfaction; and permitting a substantial amount of regular gaming machine operations only after a successful confirming step, facilitating communication between said memory device and said central processing unit upon determining that said configuration file has been successfully compared to said custodial file.

(Referring to Figure 7, Steps 102 & 104, the boot loader is the "configurator" & the BIOS is the "configuration file". The custodial file is taught in Col. 3. Lines 50-55. New files are compared to the custodial file when the authentication program determines their validity. Comparing entire files encompasses the claimed "comparing at least a representative portion."

Referring again to Figure 7 & the related description, BIOS is loaded into the main memory, as is bootstrap, OS, drivers and authentication software. In Step 106, pertinent game data such as graphics, sound and money handling data sets are accessed. In Step 108, data validity is determined. If the data is valid, the application is loaded into the device's main memory. If the data is invalid, the application is prohibited from loading. In Step 118, a second authentication program further determines validity. Again, a valid data determination leads to game data sets being loaded and an invalid data determination prohibits loading of game data sets. The process is repeated every time the machine is powered on. Additionally, the process may be performed on a periodic basis, or on demand. See also Col. 5. Lines 5-14 & Lines 28-43.

Therefore, it would have been obvious to one of ordinary skill in the art to authenticate game data in the manner recited in claims 1, 13, 19 & 20 because this would have been considered a matter of design choice failing to patentably distinguish over the authentication process taught by Alcorn. Authenticating data as in Applicant's invention would have the exact same predictable results as the authentication taught by Alcorn; game machines would be more secure. The claims also recite that the configuration file comprises instructions to enable the claimed communication [See the discussion above regarding BIOS] & that communication between memory & the CPU is disabled upon a shut down phase, [Examiner respectfully submits that disabling communication between a computer's devices during shutdown is implicit.]

Finally, after authentication is complete, game play is offered. See Step 124 of Figure 7).

Claims 3-6, 14, 15 & 20:

The claim limitations are substantially addressed with regard to the discussion in claim 1. Further, Alcorn teaches that typical gaming machines incorporate memory devices found in the computer art. Col. 1. Lines 25-39 teach various types of volatile & non-volatile memory. Alcorn teaches that such components are used in electronic gaming machines to augment the traditional slot machine game. See Col. 7. Lines 1-15 teaching ROM & non-volatile RAM. The specific type of memory device i.e., volatile/non-volatile, ROM, EEPROM, FPGA or PLD implemented in the system is a matter of design choice. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to use a wide variety of readily available storage

Art Unit: 3714

devices in the authentication process because this is viewed as a mere design consideration failing to patentably distinguish over Alcorn. Using these types of memory devices in a gaming machine (a computer) is well within the level of ordinary skill in the art & yields predictable results.

These claims, as amended, require connecting a volatile memory device in the communication path between the CPU & the memory device of claim 1. Alcorn teaches connecting a storage means to main memory to load the BIOS [a configuration file], bootstrap, OS & drivers from the storage means to main memory. See the discussion in Col. 5. Lines 63-67 & Col. 6. Lines 1-3. The device is connected such that it is in a communication path between the CPU & main memory. As explained above, Alcorn teaches different types of memory including a volatile device to be used as the storage means.

Claim 21:

While Alcorn teaches prohibiting loading of an invalid boot application (Figure 7, Step 110), Alcorn does not explicitly teach determining not to facilitate communication between said memory device and said central processing unit upon determining that said configuration file has been unsuccessfully compared to said custodial file.

(It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to not permit communication upon an unsuccessful comparison of a configuration file to a custodial file. Given that maintaining security of a gaming machine is of paramount importance, not permitting potentially dangerous software execution yields predictable results.)

Art Unit: 3714

Claim 22:

This claim requires an input device having a coin in switch or an input switch & output device with a video display – Alcorn teaches that typical gaming machines have coin acceptors & video displays. See Col. 1. Lines 32-39. His machine is no different. See Figure 1, Video Subsystem 22 & Col. 13. Lines 12-13 teaching a coin insert slot. Additionally, the gaming machine requires some type of input mechanism so it can be played.

Conclusion

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3714

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMKAR A. DEODHAR whose telephone number is (571)272-1647. The examiner can normally be reached on M-F: 8AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dmitry Suhol can be reached on 571-272-4430. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMES S. MCCLELLAN/
Primary Examiner, Art Unit 3714

/OAD/

Application/Control Number: 10/621,873
Art Unit: 3714

Page 11